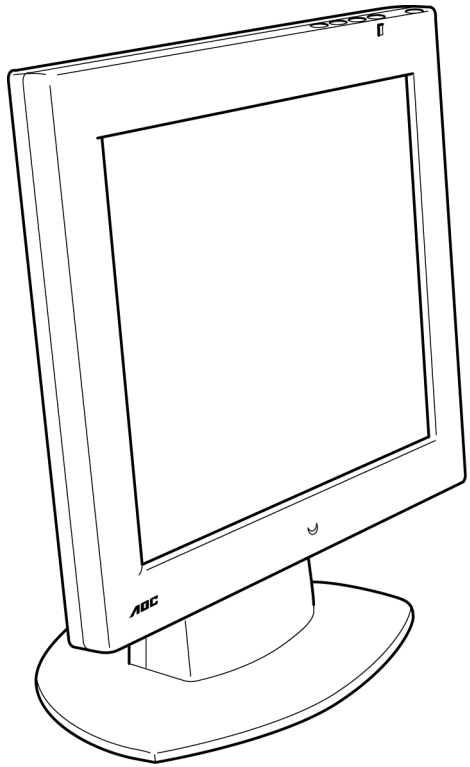


LM-700

17 inch TFT LCD Monitor

User's Manual

by Envision Peripherals, Inc.
www.aocmonitor.com

Before operating your monitor, please read this manual thoroughly.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Notice

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibility of the user to correct such interference.

As an ENERGY STAR® Partner, Envision Peripherals, Inc. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Warning

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltage is present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only with the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- For use only with power adaptor manufactured by CHI SAM ELECTRONIC, model CH-1205.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. As a safety feature, this plug will only fit into a grounded power outlet. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage due to power surges.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor yourself; opening or removing covers can expose you to dangerous voltage and other hazards. Please refer all servicing to qualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL-listed computers which have appropriately configured receptacles marked between 100 - 240 V AC, Min. 5A.
- The wall socket should be installed near the equipment and should be easily accessible.
- Disconnect the power cord to stop the power supply to the monitor.

Special Notes on LCD Monitors

The following symptoms are normal with an LCD monitor and do not indicate a problem:

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an after-image of the previous screen may remain after switching from an image that has been displayed for hours. This after-image could require several hours to disappear.
- The life of the fluorescent light used in the LCD monitor is approximately 20,000 hours. Contact your dealer or EPI service center for replacement when the screen is dark, flickering or not lighting up. Never attempt to replace it by yourself.

General Notes

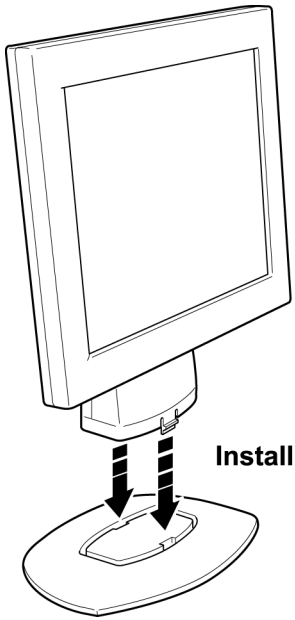
- Do not install the monitor near heat sources such as radiators or air ducts.
- Do not place monitor in direct sunlight or in areas with excessive dust, mechanical vibration or shock.
- Save the original shipping carton and packing materials in case you need to ship your monitor. Be sure to repackage your monitor as it was originally packed at the factory.
- Periodically clean your monitor with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. **Never use strong solvents such as thinners, benzene, or abrasive cleaners, since these will damage the cabinet**. Always unplug the monitor before cleaning it.

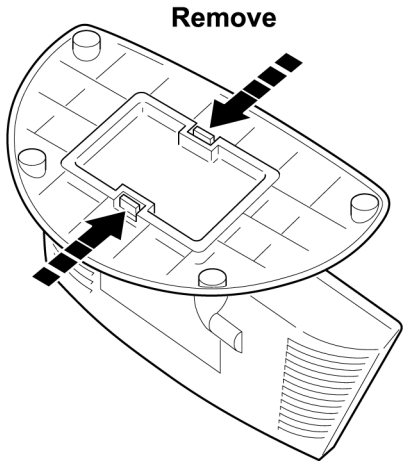
Using the Right Power Cord

The supplied power cord is a NEMA 5-15 style plug. It is UL-listed and CSA labeled for 125 volts AC.

If the monitor will be connected to your computer's power outlet, use a minimum No. 18 AWG, type SJT or SVT three conductors cord with one end terminating with a male grounded plug, rated 10A, 250V, CEE-22. The other end must terminate with a molded-on type connector body, rated 10A, 250V, having standard CEE-22 female configuration.

Installing & Removing the Base





General Features:

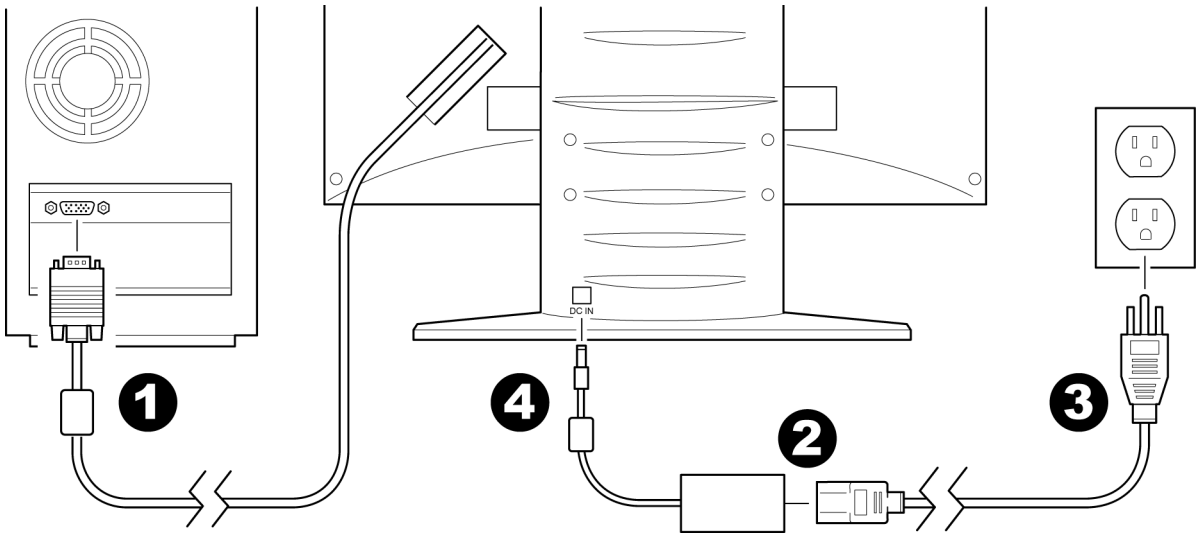
- 17" (43.2cm) TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- Supports Resolutions up to 1280 X 1024 pixels @75Hz
- EPA ENERGY STAR®
- Ergonomic Design
- Space Saving, Compact Case Design

Package Contents

The box that your monitor was shipped in should have included the following items:

1. LM-700 LCD Monitor
2. Power Adaptor
3. Power Cord
4. Windows 95/98/2000/ME/XP INF Driver Disk
5. Quick Start Guide
6. Booklet (Containing Warranty & Safety

Connecting the Wires Using the Power Cord Supplied

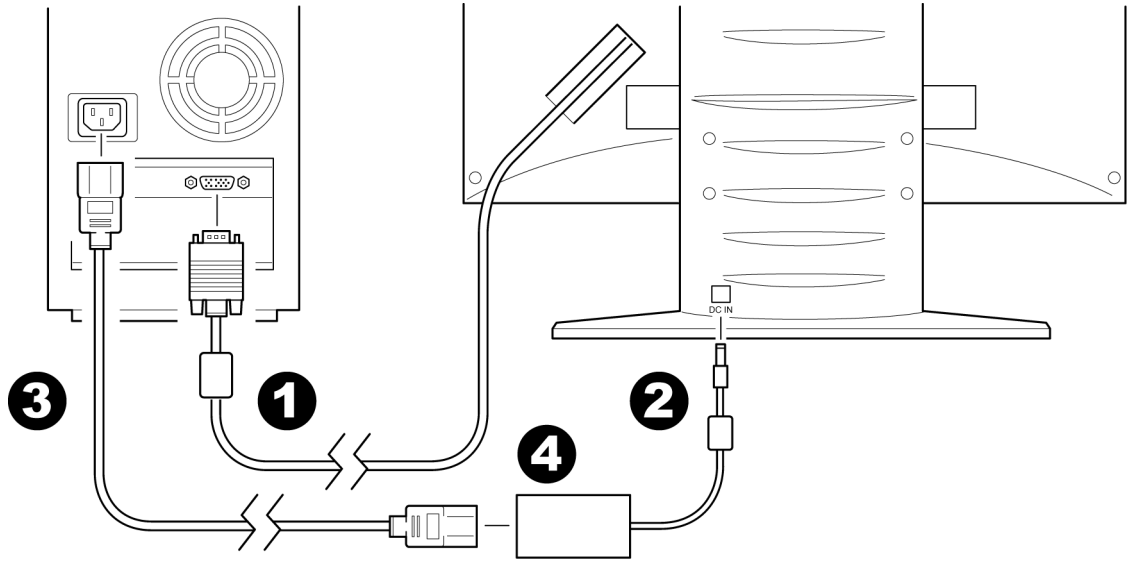


1. Connect the built-in video cable into the 15-pin connector on the back of your computer and tighten the two screws.
2. Connect the power cord into the power adaptor.
3. Plug the other end of the power cord into a grounded AC outlet or UL-approved power strip.
4. Connect the power adaptor into the DC IN socket on the back of the monitor.

Caution: Make sure the power cord is the correct type that is required in your area. This LCD monitor has a universal power supply that allows operation in either 100/120V AC or 220/240V AC voltage areas (no user adjustment is required).

If the AC outlet is not grounded (with three holes), install the proper grounding adapter (not supplied).

Connecting the Wires Using An Optional Power Cord (Not Supplied)



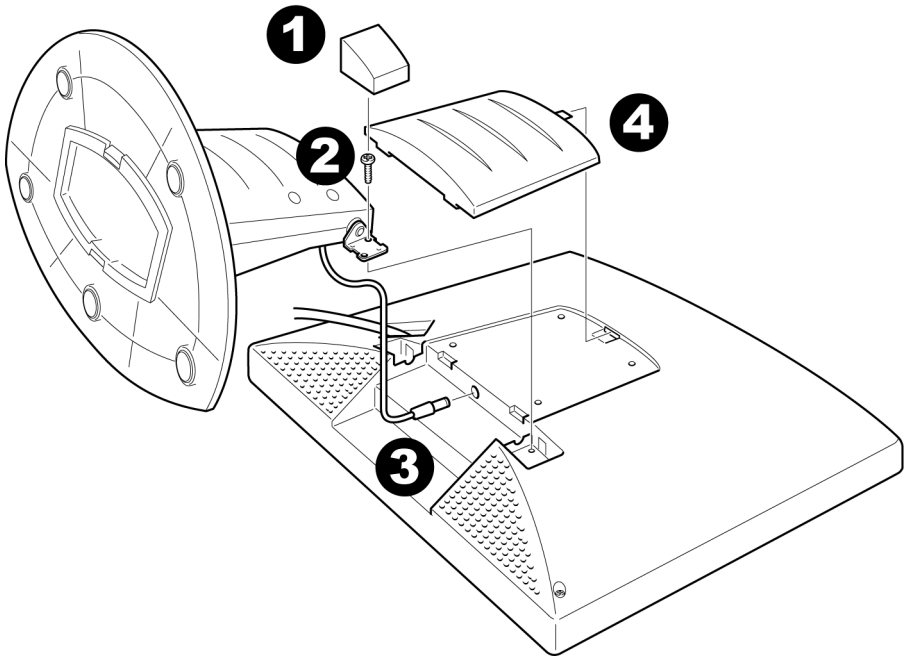
The power cord supplied with your monitor can only be connected to a grounded electrical wall socket or power strip.

If you wish to connect your monitor to a power supply using the power input socket on the back of your computer, you must purchase a power cord with CEE-22 terminated connectors (see illustration above).

Follow these steps:

1. Connect the built-in video cable into the 15-pin connector on the back of your computer and tighten the two screws.
2. Connect the power cord into the power adaptor.
3. Plug the other end of the power cord into the power output socket on your PC.
4. Connect the power adaptor into the DC IN socket on the back of the monitor.

Preparing to Install An Optional Wall Mounting Arm (Not supplied)

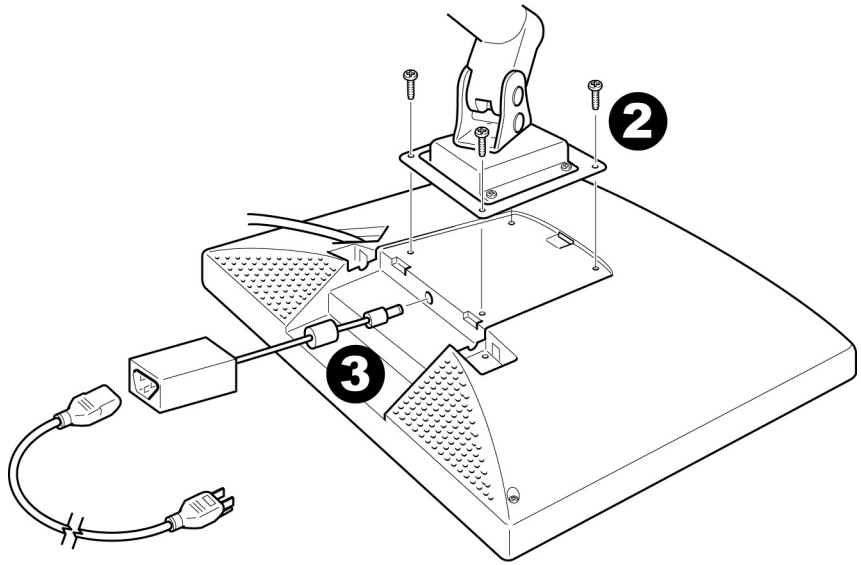


This monitor can be attached to a wall mounting arm you purchase separately. Disconnect power before this procedure. Follow these steps:

1. Pull the screw covers off the back of the monitor.
2. Support the base and remove the screws.
3. Unhook the cable into the monitor. Remove the base.
4. Remove the back cover from the panel.
5. Follow the manufacturer's instructions to assemble the wall mounting arm.

See next page for further installation instructions.

Install An Optional Wall Mounting Arm (Not supplied)



Follow these steps to finish installing the wall mounting arm:

1. Place the wall mounting arm onto the back of the monitor. Line up the holes of the arm with the holes in the back of the monitor.
2. Insert the 4 screws into the holes and tighten.
3. Insert the power cable into the slot on the back of the monitor.

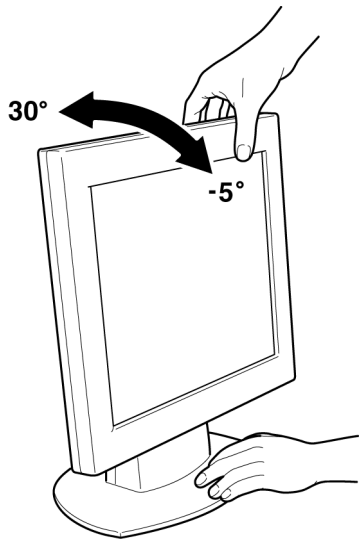
AOC's Model LM700 is compatible with the Ergotron line of mounting and arm solutions.

Contact Ergotron at 800-888-8458 or visit their web site at www.ergotron.com for more information on the many ways on which you can mount your AOC LCD monitor.

Adjusting the Viewing Angle

For optimal viewing, adjust the monitor's angle to your own preference.

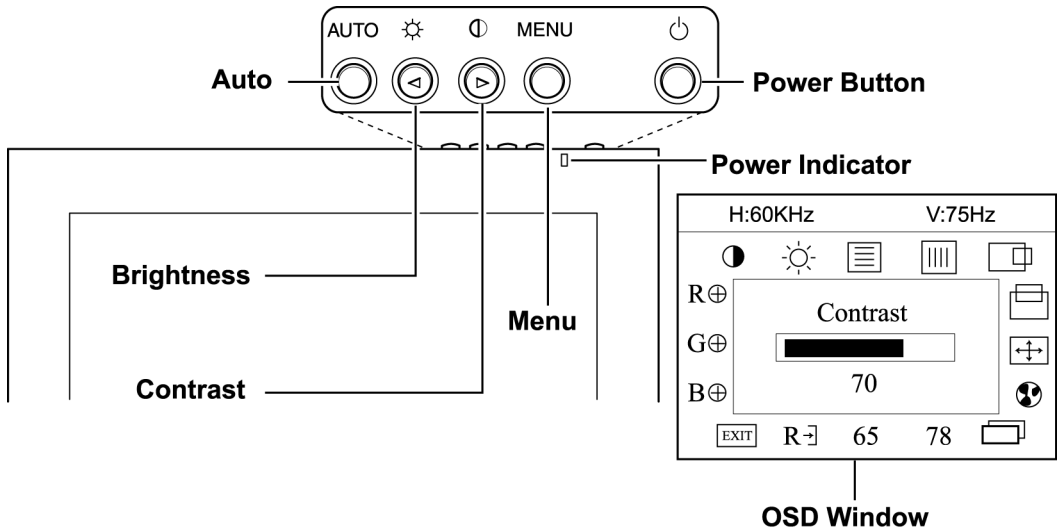
- Hold the stand firmly when you change the monitor's angle.
- You can adjust the monitor's angle from -5° to 30°.
- Do not touch the LCD screen when you change the angle. It may cause damage or breakage.
- Be careful to avoid pinching your hand in the swivel base.



How to Install INF & ICM File

1. Insert the Windows 95/98/2000/ME/XP INF Driver Disk into your floppy drive.
2. Follow the Add New Hardware Wizard instructions on the screen.
3. If the wizard asks for the location of the driver file, select drive A and press Next.

Front Panel Buttons



AUTO **Auto**: Press this button to automatically set the H-Position, V-Position, Clock and Focus settings.

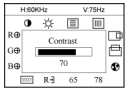
☼ **Brightness**: Press this button to adjust the picture's brightness. If the OSD window is open, this button allows you to move within the window and select desired functions.

◐ **Contrast**: Press this button to adjust the picture's contrast. If the OSD window is open, this button allows you to move within the window and select desired functions.

MENU **MENU**: Press this button to open the OSD window or exit from the OSD window.

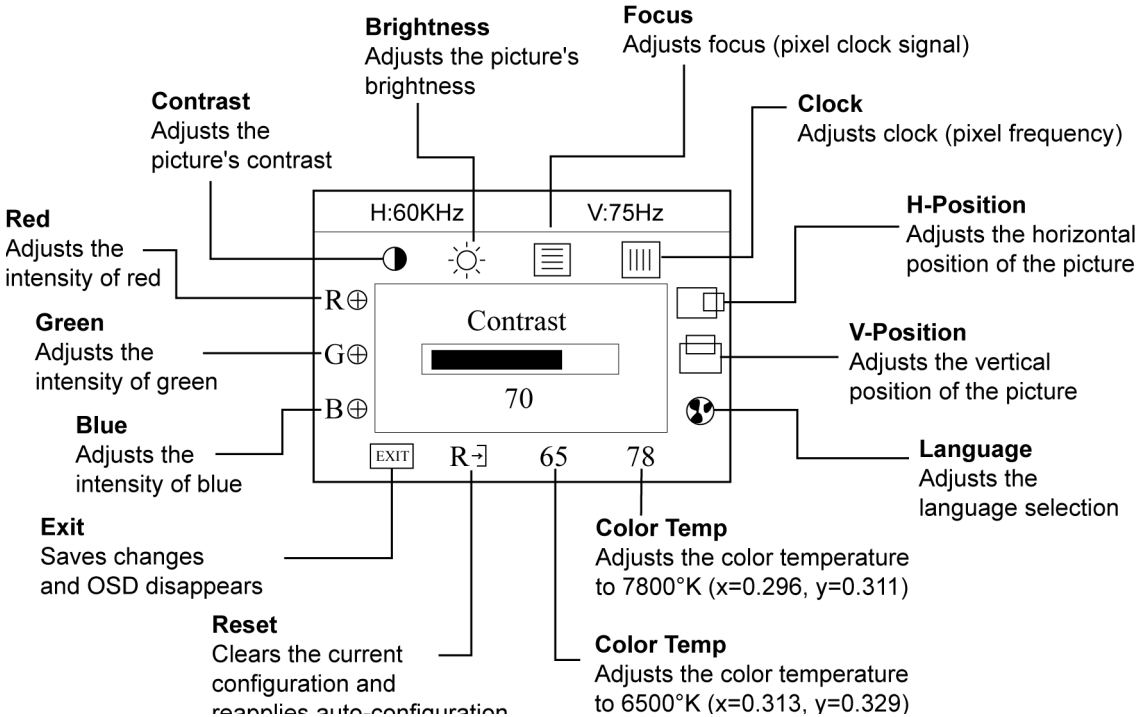
▯ **Power Indicator**: A green light indicates that the monitor is on. An orange light indicates that the monitor is in Off mode.

⏻ **Power**: Press this button to turn the monitor on or off. The power indicator will light up.



On-screen Display (OSD): Press the **MENU** button to open the OSD window and adjust settings on your monitor. (See next page.)

Adjusting the OSD Settings



1. Press the **MENU** button to open the OSD window.
2. Press the **<** or **>** buttons until the desired function is highlighted.
3. Press **MENU** to open the function's window.
4. Press the **<** or **>** buttons to change the settings of the function.
5. To save and exit, highlight the **EXIT** icon and press **MENU** or leave the monitor alone for 10 seconds. If you want to adjust any other function, repeat steps 2-4.

Note: When the OSD window is open, the input signal timing settings appear at the top.
H: stands for horizontal frequency and
V: stands for vertical frequency.

DOS-mode

This feature allows you to choose between resolutions of 720 x 400 or 640 x 400 while working in DOS-mode. Follow the instructions for selecting functions in the OSD window as listed on the previous page. Press your monitor's **Power** button off and then on to activate your chosen DOS-mode resolution. Note: the default DOS-mode resolution is 720x400@70Hz.

How to Optimize the DOS-mode

1. Insert the Windows 95/98/2000/ME INF Driver Disk into your floppy drive.
2. Open Windows Explorer to search on the floppy drive (Drive A:) to find the Dos1.exe file.
3. Double-click on the **Dos1.exe** file.
4. Expand the picture to full screen by pressing the icon on the top of window. If there is no icon, the picture is already at full screen.

If you don't have the driver disk:

1. Choose Start / Programs / MS-DOS mode.
2. Type C:\> EDIT and press **Enter.** You will be in the Dos-Editor screen.
3. Press the **AUTO** button on the front of your monitor for 2 seconds. The screen will be automatically adjusted.

If the screen is distorted (for example: the picture can't go to full screen, the background of white pattern has vertical stripe noise, or the characters are twisted):

1. Change the resolution to 640 x 400
2. Press the **Power** button off and then on.
3. Press the **AUTO** button for 2 seconds.
   Note: the above procedure must process in full-screen pattern.

To exit, press the **ESC** key or press **ALT-F**, and then press the **X** key.

Plug & Play DDC1/2B Feature

This monitor is equipped with VESA DDC1/2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities. The communication channel is defined in two levels, DDC1 and DDC2B.

The DDC1 is a unidirectional data channel from the display to the host that continuously transmits EDID information. The DDC2B is a bidirectional data channel based on the I²C protocol. The host can request EDID information over the DDC2B.

Problem	Possible Solution
Power LED is not ON	• Make sure the power button is ON. • Make sure the power adaptor is properly connected to a grounded power outlet and to the monitor.
No Plug & Play	• Confirm that your computer is Plug & Play compatible. • Confirm that your video card is Plug & Play compatible. • Inspect the video cable and make sure that none of the pins are bent. • Make sure the AOC monitor drivers are installed. (AOC monitor drivers are available at: www.aocmonitor.com)
Picture is fuzzy	• Adjust the Contrast and Brightness settings.
Picture bounces or a wave pattern is present in the picture	• Move electrical devices away from the monitor. They may be causing electrical interference.
Power LED is ON (green or orange light is ON) but there is no video or picture.	• Press a key on the keyboard or wiggle the mouse to re-activate the monitor. • Make sure the video cable is properly connected to the computer. • Inspect the video cable and make sure none of the pins are bent. • Make sure your computer is operating correctly by pressing the CAPS LOCK key and observing whether the CAPS LOCK light turns ON or OFF.
Missing one of the primary colors (RED, GREEN, or BLUE)	• Inspect the video cable and make sure that none of the pins are bent. • Make sure the video cable is properly connected to the computer.

Problem	Possible Solution
Screen image is not centered or sized properly	• Adjust the CLOCK[1] and FOCUS[2] settings or press the **AUTO** button to automatically re-configure the monitor's settings.
Picture has color defects (white does not look white)	• Adjust the settings for Red, Green and/or Blue colors or select a different color temperature: **65** (6500 K) or **78** (7800 K).
Poor brightness or contrast	• The life time of the back-light is limited. After 20,000 hours, the luminance of the light has been reduced to half of its original value. Please send the monitor to an authorized service agent for service.
Horizontal or vertical disturbances on the screen	• Adjust the CLOCK and FOCUS settings or press the **AUTO** button to automatically re-configure the monitor's settings. • Use Win 95/98 shut-down mode.

[1]CLOCK (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the picture's width is incorrect.

[2]FOCUS adjusts the phase of the pixel clock signal. With a wrong phase adjustment the picture has horizontal disturbances with very light screen images.

Note: For FOCUS and CLOCK adjustment use "dot-pattern" or Win 95/98 shut-down mode pattern.

Error Message	Possible Solution
Cable not connected	• Make sure the video cable is properly connected to the computer. If the connector is loose, tighten the connector's two screws. • Inspect the video cable and make sure that none of the pins are bent.

Error Message	Possible Solution
Input not supported	• Your computer has been set to an incompatible display mode. Right click on the desktop and choose Properties. Click the Settings tab then set your computer's display mode to one of the settings listed in the resolution chart below.
Unsupported mode try different video card setting	• Your computer's resolution is out of VESA specifications. Right click on the desktop and choose Properties. Click the Settings tab then set your computer's display mode to one of the settings listed in the resolution chart below.

Resolution Chart

Resolution (in pixels)	Vertical Frequency	Resolution (in pixels)	Vertical Frequency
640 x 480	60 Hz	800 x 600	72.2 Hz
640 x 400	70 Hz	800 x 600	75 Hz
640 x 350	70 Hz	832 x 624	74.5 Hz
720 x 400	70 Hz	1024 x 768	60 Hz
640 x 480	72.8 Hz	1024 x 768	70 Hz
640 x 480	75 Hz	1024 x 768	75 Hz
640 x 480	66.67 Hz	1024 x 768	74.92 Hz
800 x 600	56.3 Hz	1280 x 1024	60 Hz
800 x 600	60.3 Hz	1280 x 1024	75 Hz

Specifications

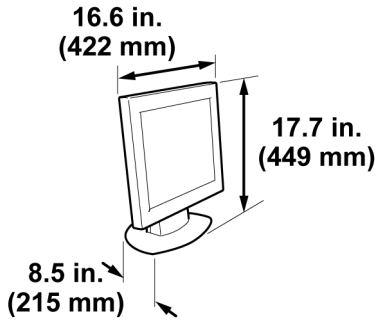
LCD Panel	Driving system	TFT Color LCD
	Size	17.0" (43.2 cm) Diagonal
	Pixel pitch	0.264 mm (H) x 0.264 mm (V)
	Viewable angle	120° (H) 100° (V)
Input	Response time	50 milliseconds
	Video	Red, Green, Blue Analog Interface
	Separate Sync.	H/V TTL
	H-Frequency	30 kHz - 80 kHz
	V-Frequency	55-75 Hz
Display Colors		16.7 million colors
Dot Clock		135 MHz
Maximum Resolution		1280 x 1024 pixels

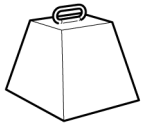
Plug & Play	VESA DDC1/ 2BTM
Input Connector	D-Sub 15-pin
Input Video Signal	Analog: 0.7 Vpp (standard), 75 OHM, Positive
Maximum Screen Size	Horizontal: 13.3" (337.92 mm) Vertical: 10.6" (270.34 mm)
Power Source	100~264 VAC, 47~63 Hz
Environmental Considerations	Operating Temp: 32° to 104°F (0° to 40°C)
	Storage Temp: 14° to 122°F (-10° to 50°C)
	Operating Humidity: 20% to 90%
Weight	12.1 lbs. (5.5 Kg)

Specifications (continued)

Front Panel Buttons		Auto Brightness Contrast Power Switch MENU/ Exit
External Controls:	Functions	Contrast Brightness Focus Clock H-Position V-Position Auto-Center Language Dos-mode Resolution Selected 6500° K 7800° K RGB Color temp. Recall Exit
EPA ENERGY STAR®		Yes
Power Consumption (Maximum)		45 Watts
Regulatory Compliance		UL, CSA, FCC, TCO99, TÜV/GS, CE

Optimal Viewing Mode: 1280 x 1024 x 75 Hz





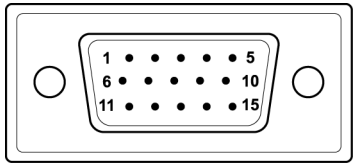
12.1 lbs.
(5.5 Kg)

Factory Preset Timing Table

Standard	Resolution (in pixels)	Horizontal Frequency	Vertical Frequency
DOS-Mode	600 x 400	31.47 kHz	70 Hz
	720 x 400	31.47 kHz	70 Hz
VGA	640 x 480	31.47 kHz	60 Hz
	640 × 480	35.00 kHz	66.6 Hz
	640 × 480	37.50 kHz	75 Hz
SVGA	800 × 600	37.879 kHz	60 Hz
	800 × 600	46.875 kHz	75 Hz
	832 × 624	49.725 kHz	75 Hz
XGA	1024 × 768	48.363 kHz	60 Hz
	1024 × 768	56.476 kHz	70 Hz
	1024 × 768	60.02 kHz	75 Hz
	1024 × 768	60.241 kHz	74.9 Hz
SXGA	1280 x 1024	64.00 kHz	60 Hz
	1280 x 1024	80.00 kHz	75 Hz

Connector Pin Assignment

Pin Number	Description	Pin Number	Description
1	Red	9	+5V
2	Green	10	Detect Cable
3	Blue	11	NC
4	Ground	12	DDC-Serial Data
5	Ground	13	H-Sync
6	R-Ground	14	V-Sync
7	G-Ground	15	DDC-Serial Clock
8	B-Ground		



15-Pin Color Display Signal Cable

This is a warranty statement for Envision color monitors including those sold within North America as specified.

Envision Peripherals, Inc. (EPI) warrants this product to be free from defects in material and workmanship for a period of three (3) years after the original date of consumer purchase. During this period, EPI will, at its option, either repair the defective product with new or rebuilt parts, or replace it with a new or rebuilt product at no charge except as stated below*. The parts or product that are replaced become the property of EPI.

* This limited warranty does not cover any losses or damages that occur as a result of:

- Shipping or improper installation or maintenance
- Misuse
- Neglect
- Any cause other than ordinary commercial or industrial application
- Adjustment by non-authorized source
- Repair, modification, or installation of options or parts by anyone other than an EPI Authorized Service Center
- Improper environment
- Excessive or inadequate heating or air conditioning or electrical power failures, surges, or other irregularities. This three-year limited warranty does not cover any of the product's firmware or hardware that you or any third party have modified or altered; you bear the sole responsibility and liability for any such modification or alteration.

All express and implied warranties for the product (including the warranties of merchantability and fitness for a particular purpose) are limited in duration to a period of three (3) years for parts and labor from the original date of consumer purchase. No warranties (either expressed or implied) apply after this period. In the United States, some states do not allow limitations on how long an implied warranty lasts. Therefore, the above limitations may not apply to you.

EPI's obligations and your remedies hereunder are solely and exclusively as stated here. EPI's liability, whether based on contract, tort, warranty, strict liability, or other theory, shall not exceed the price of the individual unit whose defect or damage is the basis of the claim. In no event shall EPI be liable for any loss of profits, loss of use or facilities or equipment or other indirect, incidental, or consequential damage. In the United States, some states do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitations may not apply to you.

Although this limited warranty gives you specific legal rights, you may have other rights which may vary from state to state.

In the United States of America, this limited warranty is only valid for products purchased in the Continental United States, Alaska, and Hawaii. Outside the United States, this limited warranty is only valid for products purchased in Canada.

In the United States, to obtain service under this limited warranty:

1. Call EPI's Customer Service, RMA Department at the toll free number (888) 662-9888 for the nearest Authorized Service Center located in your area.
2. Ask for a Return Merchandise Authorization (RMA) number.
3. Deliver the product freight pre-paid to the EPI Authorized Service Center.

If you cannot deliver the product in person:

- Pack it in its original shipping container (or equivalent)
- Put the RMA number on the shipping carton
- Insure it (or assume the risk of loss / damage during shipment)
- Pay one-way shipping charge

EPI is not responsible for damage to inbound products that were not properly packaged.

EPI will pay the return shipment charges within one of the countries specified within this warranty statement. EPI is not responsible for any costs associated with the transportation of products across international borders. This includes the international borders of the countries within this warranty statements.

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